

WHAT IS CLAIMED IS:

1 1. A method of simultaneously polishing a plurality of fiber optic cable connectors in a
2 polishing apparatus having a base with a plurality of wedge-shaped areas each of which is aligned
3 with a corresponding fiber optic cable connector, comprising:
4 securing the plurality of fiber optic cable connectors in a fixture;
5 imparting a relative motion between the fixture holding the plurality of fiber optic
6 cable connectors and the base of the polishing apparatus; and
7 controlling the relative motion so that each of the plurality of fiber optic cable
8 connectors remains in a respective one of the wedge-shaped areas.

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1 2. A method for simultaneously polishing a plurality of fiber optic cable connectors as
2 recited in claim 1, said controlling relative motion controlling the relative motion to impart the
3 relative motion in a predetermined pattern.

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1 3. A method of simultaneously polishing a plurality of fiber optic cable connectors as
2 recited in claim 2, said controlling relative motion controlling the relative motion such that the
3 predetermined pattern is a rotating locus of motion rotating within each of the wedge-shaped areas.

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1 4. A method of simultaneously polishing a plurality of fiber optic cable connectors as
2 recited in claim 1, wherein the plurality of fiber optic cable connectors include at least two different
3 types of fiber optic cable connectors.

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1 5. A method of simultaneously polishing a plurality of fiber optic cable connectors as

2 recited in claim 1, further comprising:

3 providing polishing pads in the wedge-shaped areas;

4 applying a polishing medium to the polishing pads; and

5 polishing each fiber optical cable connector with the polishing medium and a

6 corresponding one of the polishing pads.

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1 6. A method of simultaneously polishing a plurality of fiber optic cable connectors as

2 recited in claim 5, further comprising:

3 stopping the method if polishing is completed of the predetermined pattern is

4 completed.

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7 7. A method of simultaneously polishing a plurality of fiber optic cable connectors as
8 recited in claim 2, wherein the predetermined pattern is a figure eight.

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11 8. A method of simultaneously polishing a plurality of fiber optic cable connectors as
12 recited in claim 2, wherein the predetermined pattern is elliptical.

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15 9. A method of simultaneously polishing a plurality of fiber optic cable connectors as
16 recited in claim 2, wherein said controlling relative motion substantially prevents connector trace
17 overlap.

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19 10. A method of simultaneously polishing a plurality of fiber optic cable connectors in a
20 polishing apparatus having a base with a plurality of wedge-shaped areas each of which is aligned

3 with a corresponding fiber optic cable connector, comprising:
4 securing the plurality of fiber optic cable connectors in a fixture;
5 applying alternating polishing media of different abrasivity to the wedge-shaped
6 areas;
7 imparting a relative motion between the fixture holding the plurality of fiber optic
8 cable connectors and the wedge-shaped areas; and
9 controlling the relative motion so that each of the plurality of fiber optic cable
10 connectors remains in a respective one of the wedge-shaped areas.

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12. A method of simultaneously polishing a plurality of fiber optic cable connectors
13 according to claim 10, wherein said applying alternating polishing media applies a first and a second
14 polishing media having different absrasivities to respective wedge-shaped areas.

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16. A method of simultaneously polishing a plurality of fiber optic cable connectors
17 according to claim 11, further comprising:

18 rotating the base relative to the fixture so that the plurality of fiber optic cable
19 connectors are aligned with different wedge-shaped areas having polishing media with different
20 abrasivities; and
21 repeating said imparting relative motion and said controlling the relative motion.

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23. A method of simultaneously polishing a plurality of fiber optic cable connectors
24 according to claim 10, wherein said applying alternating polishing media applies a first, a second,
25 and a third polishing media having different absrasivities to respective wedge-shape areas.

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1 14. A method of simultaneously polishing a plurality of fiber optic cable connectors
2 according to claim 13, further comprising:

3 rotating the base relative to the fixture so that the plurality of fiber optic cable
4 connectors are aligned with different wedge-shaped areas having polishing media with different
5 abrasivities;

6 repeating said imparting relative motion and said controlling the relative motion;

7 rotating the base relative to the fixture so that the plurality of fiber optic cable
8 connectors are aligned with different wedge-shaped areas having polishing media with different
9 abrasivities; and

repeating said imparting relative motion and said controlling the relative motion.

1 15. A method of simultaneously polishing a plurality of fiber optic cable connectors
2 according to claim 10, wherein said applying alternating polishing media applies N polishing media
3 having different abrasivities to respective wedge-shape areas.

1 16. A method of simultaneously polishing a plurality of fiber optic cable connectors
2 according to claim 15, further comprising:

3 rotating the base relative to the fixture so that the plurality of fiber optic cable
4 connectors are aligned with different wedge-shaped areas having polishing media with different
5 abrasivities; and

repeating said imparting relative motion, said controlling the relative motion and said rotating the base (N-1) times.

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1 17. A method of simultaneously polishing a plurality of fiber optic cable connectors
2 according to claim 10, wherein the polishing media includes a polishing film and/or a polishing
3 slurry.

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1 18. A method of simultaneously polishing a plurality of fiber optic cable connectors
2 according to claim 10, further comprising:

3 providing polishing pads in the wedge-shaped areas, wherein said applying
4 alternating polishing media applies the alternating polishing media to the polishing pads.

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01 19. A method for polishing fiber optic cable connectors as recited in claim 10, wherein
02 the plurality of fiber optic cable connectors include at least two different types of fiber optic cable
03 connectors.

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1 20. A method for polishing fiber optic cable connectors as recited in claim 10, wherein
2 said controlling relative motion substantially prevents connector trace overlap.

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1 21. A method for simultaneously polishing a plurality of fiber optic cable connectors as
2 recited in claim 10, said controlling relative motion controlling the relative motion to impart the
3 relative motion in a predetermined pattern.

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1 22. A method for polishing fiber optic cable connectors as recited in claim 21, said
2 controlling relative motion controlling the relative motion such that the predetermined pattern is a

3 rotating locus of motion rotating within each of the wedge-shapes areas.

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1 23. A method for polishing fiber optic cable connectors as recited in claim 21, wherein
2 the predetermined pattern is a figure eight.

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1 24. A method for polishing fiber optic cable connectors as recited in claim 21, wherein
2 the predetermined pattern is elliptical.

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